

ABSTRACT

In one embodiment, a digital signal processor (DSP) processes both n -bit data and $(n/2)$ -bit data. The DSP includes multiple processing paths. A first processing path processes n -bit data. A second processing path is processes $(n/2)$ -bit data. The multiple processing paths may be established using multiple components or may share components. When the processing paths share components, only one of the processing paths may be used at a time.

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